

Claims

1. A process for extruding ice cream, said process comprising delivering a plurality of ice cream flows to a nozzle characterised in that, one or more of said ice cream flows are divided into a plurality of additional flows within said nozzle before extrusion of said flows.
5
2. A process according to claim 1, wherein prior to delivering the plurality of separate ice cream flows to the nozzle, a plurality of separate ice cream flows of one or more compositions and moving in a single flow direction, are combined to a single flow having one or more flow interfaces between said one or more compositions, wherein said combined flow is subsequently divided at said one or more flow interfaces to deliver the plurality of ice cream flows to the nozzle.
10
15
3. A process according to claim 1, wherein the nozzle has a fixed internal geometry.
20
4. A process according to claim 1, wherein the delivery of ice cream flows to a plurality of entry ports in said nozzle is controlled by a valve immediately upstream of the nozzle.
25
5. A process according to claim 4, wherein the ice cream flows delivered to the entry ports of the nozzle flow from a plurality of holding means.
6. A method of dispensing fresh ice cream at point of sale comprising the steps;
30

- (i) opening a valve to deliver a plurality of ice cream flows to a nozzle;
- (ii) filling a containing means with ice cream flowing from the nozzle;
- 5 (iii) closing the valve on completion of the filling;

characterised in that, subsequent to step (i) one or more of the ice cream flows are divided into a plurality of additional flows within the nozzle before extrusion.

10

- 7. Apparatus for extruding a plurality of ice cream flows in a single flow direction, comprising a nozzle, said nozzle comprising a plurality of entry ports, wherein each entry port is connected to an exit port by way of a conduit running through the nozzle, characterised in that at least one conduit branches into a plurality of sub-conduits within the nozzle, each sub-conduit being connected to an exit port.

15

- 20 8. Apparatus according to claim 7, wherein said nozzle has a fixed internal geometry.

- 9. Apparatus according to either claim 7, wherein said nozzle comprises two entry ports wherein in a first section of the nozzle one of said entry ports is connected to a conduit which branches into two sub-conduits, each sub-conduit forming a semi-annular chamber around a central conduit, said central conduit being connected to second entry port; subsequently in a second section the central conduit and semi-annular chambers from the first section are connected to a plurality of further sub-conduits, wherein each sub-conduit terminates at an exit port.

25

30

10. Apparatus according to claim 9, wherein said exit ports comprise a symmetrical array of substantially rectangular openings radially arranged about a central point.
- 5 11. An ice cream product comprising at least three radially adjacent segments and at least two different compositions.
- 10 12. An ice cream product according to claim 11, wherein said adjacent radial segments of the product comprise a plurality of substantially super-imposed layers of ice cream composition.